

# HP Universal CMDB

for the Windows and Solaris operating systems

Software Version: 8.04

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## HP Universal CMDB-HP Network Node Manager *i* (NNMi) Integration Guide

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# 1

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## **Network Node Manager *i* (NNMi) Integration with HP Universal CMDB**

This chapter explains how to integrate Network Node Manager (NNMi) with HP Universal CMDB.

This chapter includes:

### **Concepts**

- ▶ NNMi Integration – Overview on page 8
- ▶ NNMi - UCMDB Integration Architecture on page 9

### **Tasks**

- ▶ Set Up HP NNMi–HP UCMDB Integration on page 10
- ▶ Run HP NNMi–UCMDB Integration on page 11
- ▶ Use the HP NNMi–HP UCMDB Integration on page 19
- ▶ Change the HP NNMi–HP UCMDB Integration Configuration on page 22
- ▶ Disable HP NNMi–HP UCMDB Integration Configuration on page 22
- ▶ Perform Impact Analysis on page 23

### **Reference**

- ▶ HP NNMi–HP UCMDB Integration Configuration Form Reference on page 23
- ▶ NNMi Protocol Connection Parameters on page 27

**Troubleshooting and Limitations** on page 28

## **NNMi Integration – Overview**

You integrate NNMi with UCMDB using the Discovery and Dependency Mapping (DDM) application.

When you activate the **Integration – NNM Layer2** module, DDM retrieves Layer 2 network topology data from NNMi and saves the data to the Universal CMDB database. Users can then perform change management and impact analysis through the UCMDB correlation engine.

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**Note:** DDM version 8.00 or later includes a module for discovering NNMi. No additional deployment is necessary.

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This section includes the following topics:

- “Use Cases” on page 8
- “Supported Versions” on page 8

### **Use Cases**

This document is based on the following use cases:

- **Use Case 1:** A UCMDB user wants to view the Layer 2 network topology supporting servers and applications. The requirement is to use NNMi as the authoritative source for that information with access through the Universal CMDB application.
- **Use Case 2:** An NNMi operator wants to view the impact of a network access switch infrastructure failure where the impact data is available in UCMDB. The NNMi operator selects an incident or a node in NNMi and then enters a request for impacted CIs.

### **Supported Versions**

Out of the box, the following software versions are supported:

- Discovery and Dependency Mapping (DDM) Probe version 8.03 (with Content Pack 4) and later



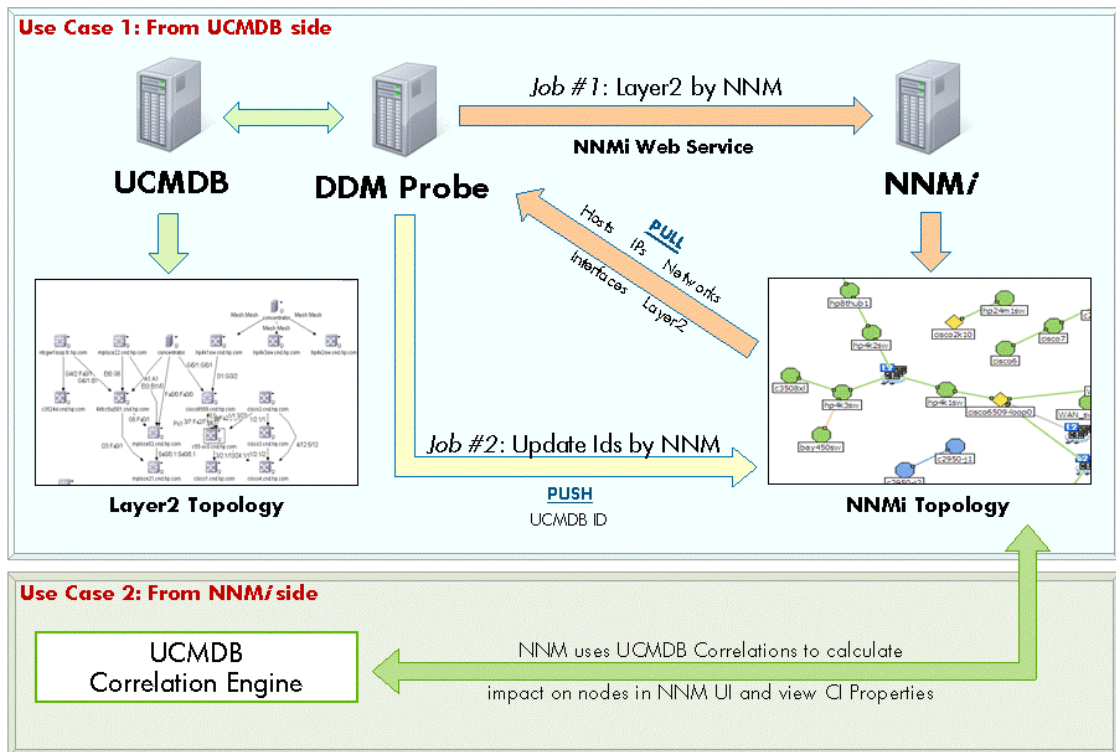
- ▶ HP NNMi version 8.11 and later

The following versions are supported after certain updates have been made (as per technical article KM629927 on the HP Support Web site at <http://support.openview.hp.com>).

- ▶ Discovery and Dependency Mapping (DDM) Probe, versions 8.0, 8.01 and 8.02.
- ▶ HP NNMi version 8.10.

To use these versions, you must first update the `nnm_sdk.jar` file as directed by HP Software support.

## NNMi - UCMDB Integration Architecture



## Set Up HP NNMi–HP UCMDB Integration

The following steps describe how to configure NNMi to communicate with UCMDB:

- “Configure the Connection between NNMi and UCMDB” on page 10
- “Customize the Integration” on page 10

### **Configure the Connection between NNMi and UCMDB**

On the NNMi management server, do the following:

- 1** In the NNMi console, open the **HP NNMi–HP UCMDB Integration Configuration** form (**Integration Module Configuration > HP UCMDB**).
- 2** Select the **Enable Integration** check box to activate the remaining fields on the form.
- 3** Enter the information for connecting to the NNMi management server. For information about these fields, see “NNMi Management Server Connection” on page 24.
- 4** Enter the information for connecting to the UCMDB server. For information about these fields, see “UCMDB Server Connection” on page 25.
- 5** Click **Submit** at the bottom of the form.

A new window displays a status message. If the message indicates a problem with connecting to the UCMDB server, re-open the **HP NNMi–HP UCMDB Integration Configuration** form (or press **ALT+LEFT ARROW** in the message window), and then adjust the values for connecting to the UCMDB server as suggested by the text of the error message.

### **Customize the Integration**

On the NNMi management server, do the following:

- 1** In the NNMi console, open the **HP NNMi–HP UCMDB Integration Configuration** form (**Integration Module Configuration > HP UCMDB**).

**2** Enter values for the following fields:

- HP UCMDB Correlation Rule Prefix
- HP UCMDB Impact Severity Level (1–9)

For details on these fields, see “Integration Behavior” on page 26.

**3** Click **Submit** at the bottom of the form.

## Run HP NNMi–UCMDB Integration

This task includes the steps to run the NNMi/Universal CMDB integration jobs.

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**Important:** To avoid conflict, do not run the UCMDB Layer 2 discovery jobs when running the NNMi Layer 2 integration discovery.

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This task includes the following steps:

- “Prerequisites” on page 12
- “Set Up the NNMi Protocol” on page 14
- “Activate the Discovery Jobs” on page 15
- “Check Messages for Successful Job Execution” on page 17
- “Topology Map and Validation of Results” on page 18

## 1 Prerequisites

- ▶ Ensure that the DDM Discovery Probe has been installed, as detailed in the *Discovery and Dependency Mapping Guide*.
- ▶ NNMi integration jobs are triggered against the IP CI of the NNMi server. This IP CI must be present in UCMDB. This IP CI may be discovered in one of the following ways:
  - ▶ “Discover the IP CI of the NNMi Server in UCMDB” on page 12
  - ▶ “Manually Add the IP CI of the NNMi Server” on page 13

After the IP CI has been discovered, perform the step “Verify CI Discovery” on page 14.

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**Note:** If you installed HP Business Availability Center or HP Operations Manager *i*, you may have installed a bundled UCMDB that uses a Foundation license. If your UCMDB installation has a Foundation license deployed, it is not possible to discover the IP CI automatically. Therefore, you should create this CI manually in the CMDB, as described in “Manually Add the IP CI of the NNMi Server.”

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### Discover the IP CI of the NNMi Server in UCMDB

To add the IP of the NNMi server to the DDM Probe range:

- 1 Navigate to **Admin > Discovery > Setup Discovery Probes**.
- 2 Select the Probe that is to be used for the NNMi integration, and add the IP address of the NNMi server to its range.

To discover the IP CI of the NNMi server:

- 1 Navigate to **Admin > Discovery > Run Discovery**.
- 2 In the **Network - Basic** discovery module, select the job **Range IPs by ICMP** and click the **Properties** tab.
- 3 In the **Range** parameter line, select the **Override** check box and add the IP address of the NNMi server.

- 4 Click **OK** to save the job, and then activate it to discover the IP CI of the NNMi server.

## Manually Add the IP CI of the NNMi Server

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**Note:** When you installed HP Business Availability Center or HP Operations Manager *i*, you may have installed a bundled UCMDB that uses a Foundation license. If your UCMDB installation has a Foundation license deployed, use the steps in this section to manually add an IP CI. If any other license (Basic or Advanced) is deployed on the UCMDB server, use the “Discover the IP CI of the NNMi Server in UCMDB” procedure.

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### To manually add the IP CI of the NNMi server

- 1 Verify that the DDM Probe is correctly installed and connected to the UCMDB server.
- 2 Add the IP of the NNMi server to the DDM Probe range:
  - a Navigate to **Admin > Discovery > Setup Discovery Probes**.
  - b Select the Probe that is to be used for the NNMi integration, and add the IP address of the NNMi server to its range.
- 3 Insert the IP CI of the NNMi server in the CMDB:
  - a Navigate to **Admin > Modeling > IT Universe Manager**.
  - b In the **View** drop-down menu of the CI Selector’s View Browser, select **Network Topology**.
  - c Click the **New CI** button.
  - d In the **New CI** dialog box, select the **IP** CIT from the tree and enter the following values:



Field	Description
IP Address	The IP address of the NNMi server.

Field	Description
IP Domain Name	The UCMDB domain name (for example, DefaultDomain).
IP Probe Name	The name of the DDM Probe (for example, DefaultProbe).

- e Click **Save** to save the IP CI.

## Verify CI Discovery

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**Note:** Verification of CI discovery is relevant only when the IP CI of the NNMi server is discovered (as described in “Discover the IP CI of the NNMi Server in UCMDB” on page 12), not when it is added manually.

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In HP Universal CMDB, verify that the following CIs have been discovered before running the NNMi discovery:

- The **IP** CI of the NNMi server (through the ICMP jobs)
- The **Host** CI of the NNMi server (through the Host Connection jobs)
- The **Process** CI of the NNMi Host (through the Host Resource jobs)




To activate a job, select it and click the **Activate** button. For an explanation of a discovery job, see “Jobs” in *Discovery and Dependency Mapping Guide*.

## 2 Set Up the NNMi Protocol

In this step, you configure an NNMi protocol entry. This enables the UCMDB server to access information on the NNMi server.

- a Click **Admin > Discovery > Set Up Discovery Probes** to open the Setup Discovery Probes window.
- b If no Probe exists, select **Domains and Probes** and click the **Add Domain or Probe** button to open the Add New Domain dialog box.
- c Enter a name for the new domain and click **OK**.



- d** In the Domains and Probes tree, navigate to the Probe for which you want to set up the NNMi protocol, and click **Credentials**.
- e** Select **NNM Protocol** and click .
- f** Set the protocol attributes, as detailed in “NNMi Protocol Connection Parameters” on page 27, and click **OK**.

For further information about setting up protocols, see “Domain Credential References” in *Discovery and Dependency Mapping Guide*.

### 3 Activate the Discovery Jobs

The NNMi jobs are included in UCMDB’s **Integration – NNM Layer 2** module.

► **Layer 2 by NNM job**

This job connects to the NNMi Web service and retrieves NNMi discovered nodes, IPs, networks, interfaces, and Layer 2 connection information to create a Layer 2 topology in UCMDB. The job is activated against the **IP** CI of the NNMi server (discovered in the “Verify CI Discovery” step above).

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**Note:** Due to the large volume of data discovered by this DDM job, it may take a while for the Probe to send the data back to the server. If there are more than 20,000 CIs, the Probe returns data in chunks of 20,000 objects at a time.

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**To activate the Layer 2 by NNM job:**

- a** Navigate to **Admin > Discovery > Run Discovery**.
- b** In the **Integration - NNM Layer2** discovery module, select the job **Layer2 by NNM** and click the **Properties** tab.
- c** Right-click the job name and select **Activate**.

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**Note:** Steps d through f are necessary only if the NNMi server's IP address CI was added manually, as described in “Manually Add the IP CI of the NNMi Server” on page 13. If the server's IP address was discovered by DDM (as described in “Discover the IP CI of the NNMi Server in UCMDB” on page 12), skip steps d through f.

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- d** When the job has been activated, click the **Add CI** button.
- e** Search for the IP CI of the NNMi server and click **Add** to add the IP CI of the NNMi server to the triggered CIs section.
- f** Click **Close** to close the **Choose CIs to Add** dialog box. This causes the job to be activated against the selected IP CI of the NNMi server.

► **Update Ids in NNM job**

This job updates the nodes in the NNMi topology with the UCMDB IDs of the corresponding nodes in UCMDB. This job retrieves the UCMDB IDs of the NNMi hosts from the UCMDB server using the UCMDB Web Services API. The job then updates the **UCMDB\_ID** custom attribute on the corresponding node object on the NNMi server using the NNMi Web service. Because the NNMi Web service enables updating of only one node at a time, this process might take a while, depending on the number of nodes involved. Check **probeMgr-patternsDebug.log** for the update status.

**To activate the Update Ids in NNM job:**

- a** Navigate to **Admin > Discovery > Run Discovery**.
- b** In the **Integration - NNM Layer2** discovery module, select the job **Update Ids in NNM**.
- c** Right-click the job name and select **Activate**.

**Note:** Steps d through f are necessary only if the NNMi server's IP address CI was added manually, as described in “Manually Add the IP CI of the NNMi Server” on page 13. If the server's IP address was discovered by DDM (as described in “Discover the IP CI of the NNMi Server in UCMDB” on page 12), skip steps d through f.





- d** When the job has been activated, click the **Add CI** button.
- e** Search for the IP CI of the NNMi server and click **Add** to add the IP CI of the NNMi server to the triggered CIs section.
- f** Click **Close** to close the **Choose CIs to Add** dialog box. This causes the job to be activated against the selected IP CI of the NNMi server.

#### 4 Check Messages for Successful Job Execution

You can monitor the **wrapperProbeGw.log** file for job invocation, execution (and possible error) messages. For further debugging information, check the **probeMgr-patternsDebug.log** file, located in **C:\hp\DDM\DiscoveryProbe\root\logs\**.

The following example shows typical successful job execution messages for the **Layer 2 by NNM** job:

```
- The Job 'NNM Layer 2' started invocation (on 1 destinations)
- Starting NNM_Integration_Utils:mainFunction
- Server: it2tst10.cnd.hp.com, Port: 80, Username: system, MaxPerCall: 2500,
MaxObjects: 50000
- Service URL:
http://it2tst10.cnd.hp.com:80/IPv4AddressBeanService/IPv4AddressBean
- Service URL: http://it2tst10.cnd.hp.com:80/NodeBeanService/NodeBean
- Service URL: http://it2tst10.cnd.hp.com:80/IPv4SubnetBeanService/IPv4SubnetBean
- Service URL: http://it2tst10.cnd.hp.com:80/InterfaceBeanService/InterfaceBean
- Service URL:
http://it2tst10.cnd.hp.com:80/L2ConnectionBeanService/L2ConnectionBean
- OSHVector contains 45426 objects.
- The probe is now going to send back 45426 objects.
- This transfer may take more time than normal due to the large amount of data being
sent to the server.
```

The following example shows typical successful job execution messages for the **Update Ids in NNM** job:

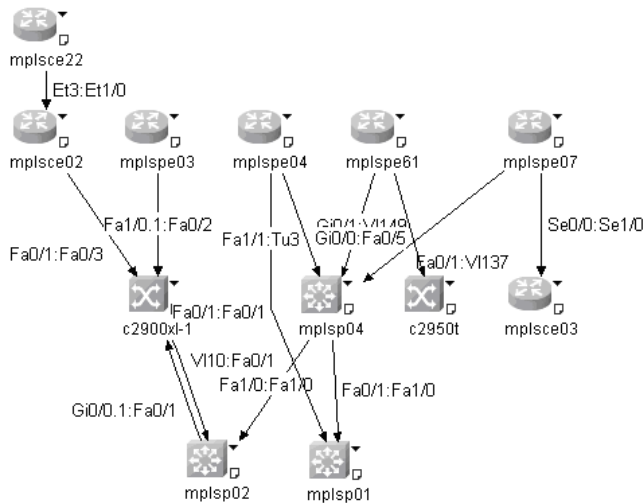
- The Job 'NNM Update IDs' started invocation (on 1 destinations)
- UCMDb Server: ucmdb75.fkam.cup.hp.com, UCMDb Port: 8080, UCMDb Username: admin, UCMDb Protocol: http, UCMDb Context: /axis2/services/UcmdbService
- NNM Server: it2tst10.cnd.hp.com, NNM Port: 80, NNM Username: system
- Getting ready to update Custom Attribute UCMDb\_ID on 8161 NNM nodes in NNM
- This process may take a while since the UCMDb\_ID custom attribute in NNM can only be updated one node at a time. Check probeMgr-patternsDebug.log for status update.

## 5 Topology Map and Validation of Results

Verify that data was discovered using the NNMI integration jobs.

### a For a **Layer 2** by NNM job:

- In UCMDb, navigate to **Admin > Modeling > IT Universe Manager**.
- In the **View** drop-down menu of the CI Selector's View Browser, select **Layer 2**. This view displays the CIs and relationships discovered by the integration job.



### b For an **Update Ids in an NNM** job:

- In NNMi, open an NNMi node that was discovered in UCMDb.

- ▶ On the **Custom Attributes** tab, look for the **UCMDB\_ID** custom attribute, which should contain the UCMDB ID of the corresponding host in UCMDB.

## Use the HP NNMi–HP UCMDB Integration

When you have set up the HP NNMi–HP UCMDB integration, the following URL actions are added to the NNMi console:

- ▶ The **Find UCMDB Impacted CIs** action, which is described in “View Impacted CIs” on page 19.
- ▶ The **Open CI in UCMDB** action, which is described in “View the UCMDB CI” on page 21.

For information about using the integration from the UCMDB user interface, see “Run HP NNMi–UCMDB Integration” on page 11.

### View Impacted CIs

Testing for impacted configuration items in UCMDB involves firing a test event of the designated severity and then evaluating the specified correlation rules to determine if the event impacts any other configuration items.

For example:

- ▶ Correlation rule 1 might specify the following impacts:
  - ▶ If Router A experiences a management event of severity 8, Router B and Router C are impacted.
  - ▶ If Router A experiences a management event of severity 9, Router B, Router C, and Router D are impacted.
- ▶ Correlation rule 2 might specify the following impact:
  - ▶ If Router A experiences a management event of any severity, Service E is impacted.

The results of impact analysis on Router A are as follows:

- For a management event of severity 1–7, Service E would be impacted.
- For a management event of severity 8, Router B, Router C, and Service E would be impacted.
- For a management event of severity 8, Router B, Router C, Router D, and Service E would be impacted.

For more information about correlation rules, see “Correlation Manager” in *Model Management*.

For the HP NNMi–HP UCMDB integration, the parameters described in “Integration Behavior” on page 26 specify the severity of the test event and the group of UCMDB correlation rules to evaluate.

The **Find UCMDB Impacted CIs** action displays a list of the UCMDB configuration items that would be impacted for the selected node or interface according to the values of the HP UCMDB Correlation Rule Prefix and HP UCMDB Impact Severity Level (1–9) parameters.

The **Find UCMDB Impacted CIs** action is available from the following NNMi console locations:

- Any node inventory view
- Any interface inventory view
- Any map view (with a node or interface selected)
- Any incident browser

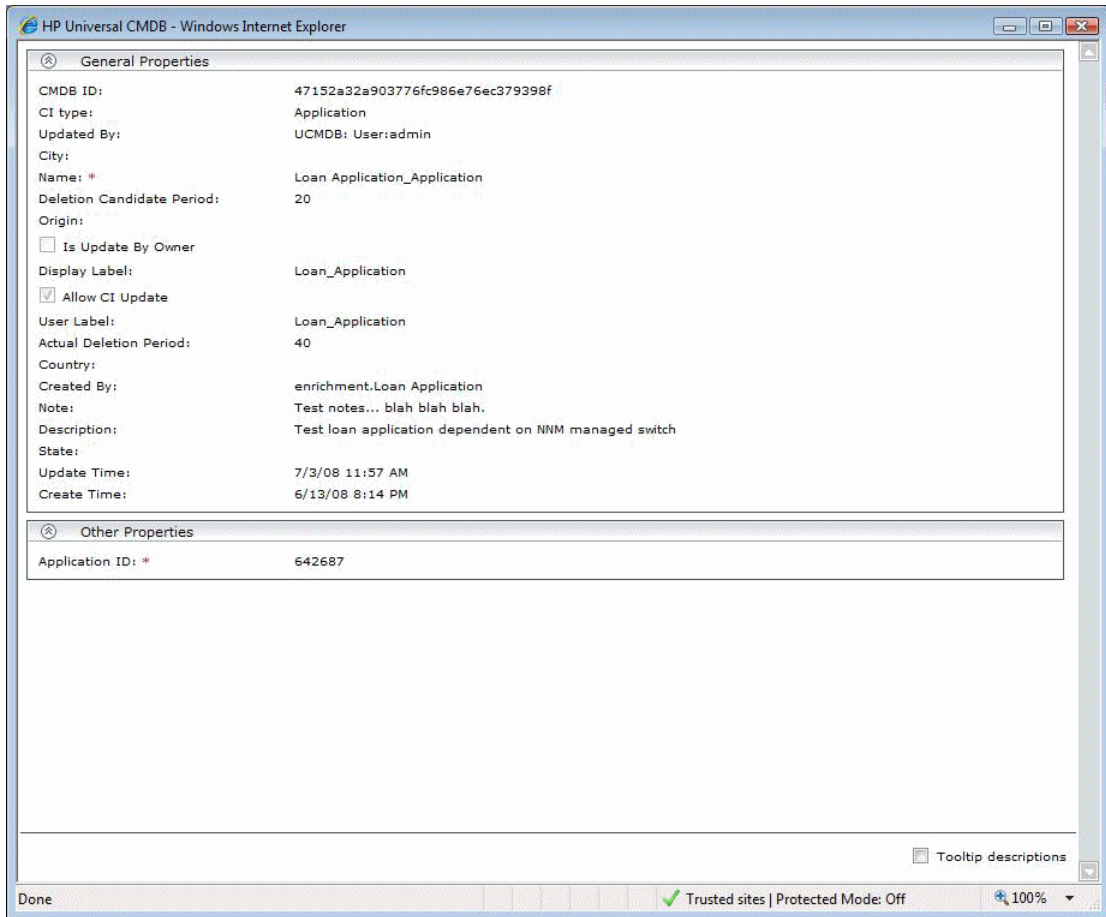
---

**Note:** The **Find UCMDB Impacted CIs** action is available for all nodes and interfaces in the NNMi topology, regardless of whether these objects are modeled in the UCMDB database.

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## View the UCMDB CI

To launch the UCMDB information for a specific CI, select that CI in the HP UCMDB Impacted CIs window (the results of the **Find UCMDB Impacted CIs** action), and then click **Actions > Open CI in UCMDB**.



**Note:** Since UCMDB is not supported on FireFox, this cross launch works only if NNMi is running in Internet Explorer.

## **Change the HP NNMi–HP UCMDB Integration Configuration**

To update the HP NNMi–HP UCMDB Integration Configuration, perform the following steps:

- 1** In the NNMi console, open the **HP NNMi–HP UCMDB Integration Configuration** form (**Integration Module Configuration > HP UCMDB**).
- 2** Modify the values as appropriate. For information about the fields on this form, see “HP NNMi–HP UCMDB Integration Configuration Form Reference” on page 23.
- 3** Verify that the **Enable Integration** check box at the top of the form is selected, and then click **Submit** at the bottom of the form.

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**Note:** The changes take effect immediately. You do not need to restart **ovjboss**.

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## **Disable HP NNMi–HP UCMDB Integration Configuration**

To disable the HP NNMi–HP UCMDB Integration Configuration, perform the following steps:

- 1** In the NNMi console, open the **HP NNMi–HP UCMDB Integration Configuration** form (**Integration Module Configuration > HP UCMDB**).
- 2** Clear the **Enable Integration** check box at the top of the form, and then click **Submit** at the bottom of the form. The integration URL actions are no longer available.

---

**Note:** The changes take effect immediately. You do not need to restart **ovjboss**.

---

## Perform Impact Analysis

You run impact analysis on a node in NNMi. Use the Universal CMDB Web Services API to call the NNMi correlations in the **NNM\_Integration.zip** package:

- ▶ NNM\_Application\_impacts\_Application
- ▶ NNM\_Host\_impacts\_Application
- ▶ NNM\_Switch\_Router\_impacts\_Host

For details on running impact analysis, refer to the NNMi documentation. For details on the Universal CMDB Web Services API, see “The HP Universal CMDB Web Service API” in *HP Universal CMDB Integrations*. For details on correlation, see “Correlation Manager” in *Model Management*.

## HP NNMi–HP UCMDB Integration Configuration Form Reference

The HP NNMi–HP UCMDB Integration Configuration form contains the parameters for configuring communications between NNMi and UCMDB. This form is available from the Integration Module Configuration workspace.

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**Note:** Only NNMi users with the Administrator role can access the HP NNMi–HP UCMDB Integration Configuration form.

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The HP NNMi–HP UCMDB Integration Configuration form collects information for the following general areas:

- ▶ “NNMi Management Server Connection” on page 24
- ▶ “UCMDB Server Connection” on page 25
- ▶ “Integration Behavior” on page 26

To apply changes to the integration configuration, update the values on the **HP NNMi–HP UCMDB Integration Configuration** form, and then click **Submit**.

This section also includes the following topics:

- “NNMi Management Server Connection” on page 24
- “UCMDB Server Connection” on page 25
- “Integration Behavior” on page 26

## NNMi Management Server Connection

The following table lists the parameters for connecting to the NNMi management server. This is the same information that you use to open the NNMi console. You can determine many of these values by examining the URL that invokes an NNMi console session. Coordinate with the NNMi administrator to determine the appropriate values for this section of the configuration form.

The default NNMi configuration uses http for connecting to the NNMi console. For information about configuring this connection to use https, see the chapter about enabling https for NNMi in the *HP Network Node Manager i-series Software Deployment Guide*.

Field	Description
HP NNMi SSL Enabled	<p>The connection protocol specification.</p> <ul style="list-style-type: none"> <li>➤ If the NNMi console is configured to use https, select the <b>NNMi SSL Enabled</b> check box.</li> <li>➤ If the NNMi console is configured to use http, clear the <b>NNMi SSL Enabled</b> check box. This is the default configuration.</li> </ul>
HP NNMi Host	<p>The fully-qualified domain name of the NNMi management server. This field is pre-filled with host name that was used to access the NNMi console. Verify that this value is the name that is returned by the <b>nnmofficialqdn.ovpl -t</b> command run on the NNMi management server.</p>



Field	Description
HP NNMi Port	<p>The port for connecting to the NNMi console. This field is pre-filled with the port that the jboss application server uses for communicating with the NNMi console, as specified in the following file:</p> <ul style="list-style-type: none"> <li>▶ <i>Windows:</i> %NnmDataDir%\shared\nnm\conf\nnm.ports.properties</li> <li>▶ <i>UNIX:</i> \$NnmDataDir/shared/nnm/conf/nnm.ports.properties</li> </ul> <p>For non-SSL connections, use the value of <b>jboss.http.port</b>, which is 80 or 8004 by default (depending on the presence of another Web server when NNMi was installed).</p> <p>For SSL connections, use the value of <b>jboss.https.port</b>, which is 443 by default.</p>
HP NNMi User	The user name for connecting to the NNMi console. This user must have the NNMi Administrator or Web Service Client role.
HP NNMi Password	The password for the specified NNMi user.

## UCMDB Server Connection

The following table lists the parameters for connecting to the Web services on the UCMDB server. Coordinate with the UCMDB administrator to determine the appropriate values for this section of the configuration.

Field	Description
HP UCMDB SSL Enabled	<p>The connection protocol specification for connecting to the UCMDB Web services.</p> <ul style="list-style-type: none"> <li>▶ If the UCMDB Web services are configured to use https, select the <b>HP UCMDB SSL Enabled</b> check box.</li> <li>▶ If the UCMDB Web services are configured to use http, clear the <b>HP UCMDB SSL Enabled</b> check box. This is the default configuration.</li> </ul>
HP UCMDB Host	The fully-qualified domain name of the UCMDB server.

Field	Description
HP UCMDB Port	The port for connecting to the UCMDB Web services. If you are using the default UCMDB configuration, use port 8080 (for non-SSL connections to UCMDB).
HP UCMDB User	A valid UCMDB user account name with the UCMDB Administrator role.
HP UCMDB Password	The password for the specified UCMDB user.

## Integration Behavior

The following table lists the parameters that describe the integration behavior. Coordinate with the UCMDB administrator to determine the appropriate values for this section of the configuration.

Field	Description
HP UCMDB Correlation Rule Prefix	The prefix of the UCMDB correlation rules that the <b>Find UCMDB Impacted CIs</b> action runs to calculate impact. The default prefix of NNM_ corresponds to the default UCMDB impact correlation rules in the integration package provided by UCMDB (the <b>NNM_Integration.zip</b> file).
HP UCMDB Impact Severity Level (1–9)	The severity level at which to apply the UCMDB impact correlation rules. HP recommends using the highest severity, 9, to include all rules that start with the specified HP UCMDB Correlation Rule Prefix in the calculation of possible impact.

## NNMi Protocol Connection Parameters

The following table lists the connection parameters from DDM to NNMi.

Field	Description
Connection Timeout	The timeout (in milliseconds) after which the DDM Probe stops trying to connect to the NNMi server.
NNM Password	The password for the specified NNMi Web service (for example, Openview).
NNM Username	The user name for connecting to the NNMi console. This user must have the NNMi Administrator or Web Service Client role.
NNM Webservice Port	<p>The port for connecting to the NNMi console. This field is pre-filled with the port that the jboss application server uses for communicating with the NNMi console, as specified in the following file:</p> <ul style="list-style-type: none"> <li>▶ Windows: %NnmDataDir%\shared\nnm\conf\nnm.ports.properties</li> <li>▶ UNIX: \$NnmDataDir/shared/nnm/conf/nnm.ports.properties</li> </ul> <p>For non-SSL connections, use the value of <code>jboss.http.port</code>, which is 80 or 8004 by default (depending on the presence of another Web server when NNMi was installed).</p> <p>For SSL connections, use the value of <b><code>jboss.https.port</code></b>, which is 443 by default.</p>
NNM Webservice Protocol	The protocol for the NNMi Web service (the default is http).
UCMDB Password	The password for the UCMDB Web service (the default is admin).
UCMDB Username	A valid UCMDB Web service account name with the UCMDB Administrator role (the default is admin).

Field	Description
UCMDB Webservice Port	The port for connecting to the UCMDB Web service. If you are using the default UCMDB configuration, use port 8080 (for non-SSL connections to UCMDB).
UCMDB Webservice Protocol	The connection protocol specification for connecting to the UCMDB Web services. <ul style="list-style-type: none"> <li>▶ If the UCMDB Web services are configured to use https, select the <b>HP UCMDB SSL Enabled</b> check box.</li> <li>▶ If the UCMDB Web services are configured to use http, clear the <b>HP UCMDB SSL Enabled</b> check box. This is the default configuration.</li> </ul>

## Troubleshooting and Limitations

- ▶ **Problem.** The NNMi Web service responds with a **cannot interrogate model** message.

**Solution.** This message usually indicates that the Web services request made to the NNMi server is incorrect or too complex to process. Check the NNMi jbossServer.log file for details.

- ▶ **Problem.** If an excessive number of nodes are to be updated with the same UCMDB ID, it may take a while for the update pattern to complete.

**Solution.** The volume of data retrieved from the NNMi server might be large. The recommended memory requirements for the DDM Probe process is 1024 MB. Since the NNMi Web service enables updating the individual nodes one at a time, the time to update the nodes may take a while.

- ▶ **Problem.** You have verified the values in the **HP NNMi–HP UCMDB Integration Configuration** form, but the status message still indicates a problem with connecting to the UCMDB server.

**Solution.**

- a Clear the Web browser cache.
- b Clear all saved form or password data from the Web browser.

- c Close the Web browser window completely, and then re-open it.
- d Re-enter the values in the **HP NNMI–HP UCMDB Integration Configuration** form.

- **Problem.** The **Layer 2 by NNM** job finishes with the following warning:  
Failed to get any Layer 2 links from NNM.

**Solution.** Refer to technical article KM629927 on the HP support Web site at <http://support.openview.hp.com>.

- **Problem.** Either of the NNMI integration jobs fails with the following error in the DDM log files: com.hp.ov.nms.sdk.node.NmsNodeFault: Cannot interrogate model.

**Solution.** This error typically means that the NNMI server failed to process the Web services call. Check the following two logs on the NNMI server for exceptions when the integration was activated:

- jbossServer.log
- sdk.0.0.log

- **Problem.** Either of the NNMI integration jobs fail with the following error:  
Could not find Discovery Probe 'DefaultProbe'. Task for TriggerCI will not be created.

**Solution.**

- a Right-click the job and select **Go To Pattern**.
- b Click the **Pattern Management** tab.
- c Select the **Override default Probe selection** check box, and enter the name of the Probe used for the NNMI integration in the **Probe** field.
- d Click **Save** to save the pattern, then reactivate the job against the **IP** CI of the NNMI server.

